

Limarosta[®] 316L-130

EMR
SAHARA[®]

CLASSIFICATION

AWS A5.4	E316L-17	A-Nr	8	Mat-Nr	1.4430
ISO 3581-A	E 19 12 3 L R 5 3	F-Nr	5		
		9606 FM	5		

TEMPERATURE RANGE

Pressurized parts : -120...+350°C
Oxidation resistance : n.a

GENERAL DESCRIPTION

A rutile-basic all position stainless steel electrode for 316L or equivalent steels
Molybdenum level min. 2.7 %
High recovery (130%) providing high welding speed
Excellent side wall fusion, no undercut
Only for down hand position
Excellent for fillet welds and filling V- and X-grooves
Weldable on AC and DC+ polarity
Only available in vacuum sealed Sahara ReadyPack[®] (SRP)

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F

CURRENT TYPE

AC / DC +

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Mn	Si	Cr	Ni	Mo	FN [acc.WRC 1992]
0.02	0.65	1.0	18.0	11.5	2.8	4-10

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Condition	0.2% Proof strength [N/mm ²]	Tensile strength [N/mm ²]	Elongation [%]	Impact ISO-V(J)		
				+20°C	-20°C	-105°C
Required: AWS A5.4 ISO 3581-A Typical values	not required min. 320 450	min. 490 min. 510 580	min. 30 min. 25 40	not required not required 70	60	40
AW						

PACKAGING AND AVAILABLE SIZES

SRP	Diameter (mm)	3.2	4.0	5.0
	Length (mm)	450	450	450
Pieces / unit	29	23	19	
Net weight/unit (kg)	1.7	2.0	2.3	

Identification Imprint: 316L-17 / LIMAROSTA 316 L-130 Tip Color: pink

Limarosta[®] 316L-130: rev. C-EN24-01/02/16

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EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	EN 10213-4	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Extra low carbon [C <0.03%]					
	X2CrNiMo17-12-2		1.4404	(TP)316L CF-3M	S31603 J92800
	X2CrNiMo18-14-3		1.4435	(TP)316L	S31603
	X2CrNiMoN17-11-2		1.4406	(TP)316LN	S31653
	X2CrNiMoN17-13-3		1.4429		
Medium carbon [C >0.03%]					
	X4CrNiMo17-12-2		1.4401	(TP)316	S31600
	X4CrNiMo17-13-3		1.4436		
		GX5CrNiMo19-11	1.4408	CF 8M	J92900
Ti-, Nb stabilized					
	X6CrNiMoTi17-12-2		1.4571	316Ti	S31635
	X6CrNiMoNb17-12-2		1.4580	316Cb	S31640
	X6CrNiNb18-10		1.4550	(TP)347	S34700
		GX5CrNiNb19-10	1.4552	CF-8C	J92710

CALCULATION DATA

Sizes		Current range (A)	Current type	Arc time	Energy	Dep. rate	Weight/ 1000 pcs (kg)	Electrodes/ kg weldmetal B	kg electrodes/ kg weldmetal 1/N
Diam. x length (mm)	- per electrode at max. current - (S)*			E(kJ)	H(kg/h)				
3.2 x 450	90-120	DC+	68	227	1.9	60.4	28	1.67	
4.0 x 450	120-160	DC+	78	376	2.5	91.0	18	1.67	
5.0 x 450	160-200	DC+	81	577	3.7	143.7	12	1.72	

*Stub end 35mm

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions	
	PA/1G	PB/2F
3.2	110A	105A
4.0	155A	150A
5.0	175A	175A